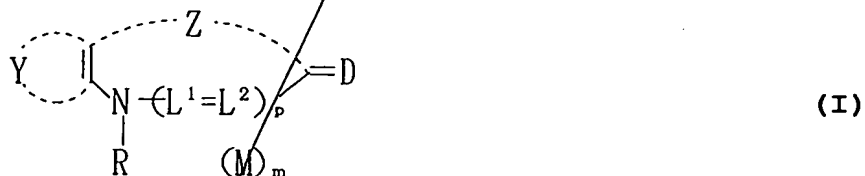


WHAT IS CLAIMED IS:

1. A silver halide photographic material which comprises at least one methine dye represented by the following formula (I):



wherein Y represents a furan ring or a pyrrole ring, and Y may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring, or may have a substituent; the bond between two carbon atoms in which Y is condensed may be a single bond or a double bond; Z represents an atomic group necessary to form a 5- or 6-membered nitrogen-containing heterocyclic ring, and Z may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring; R represents a substituted or unsubstituted alkyl group, aryl group, or heterocyclic group; D represents a group necessary to form a methine dye; L¹ and L² each represents a methine group; p represents 0 or 1; M represents a counter ion; and m represents a number of 0 or higher necessary to neutralize the charge in the molecule.

2. A silver halide photographic material which comprises at least one methine dye represented by the following formula (I):



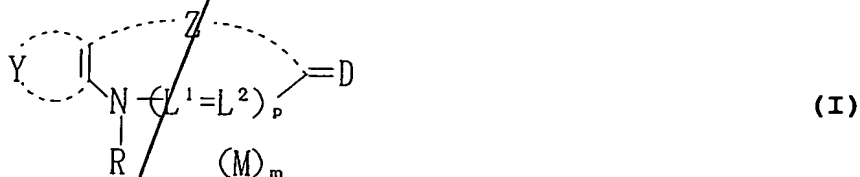
wherein Y represents an atomic group necessary to form a 5- or 6-membered unsaturated heterocyclic ring, and Y may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring, or may have a substituent; the bond between two carbon atoms in which Y is condensed may be a single bond or a double bond; Z represents an atomic group necessary to form a 5- or 6-membered nitrogen-containing heterocyclic ring, and Z may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring; R represents a substituted or unsubstituted alkyl group, aryl group, or heterocyclic group; D represents a group necessary to form a methine dye; L¹ and L² each represents a methine group; p represents 0 or 1; M represents a counter ion; and m represents a number of 0 or higher necessary to neutralize the charge in the molecule; wherein the condensed ring containing Y and Z in the methine dye represented by formula (I) is selected from the following Y-1 to Y-26, provided that Y-1 to Y-3 and Y-6 to Y-26 may further be condensed with

1963-1964 1964-1965 1965-1966 1966-1967 1967-1968 1968-1969 1969-1970 1970-1971 1971-1972 1972-1973 1973-1974 1974-1975 1975-1976 1976-1977 1977-1978 1978-1979 1979-1980 1980-1981 1981-1982 1982-1983 1983-1984 1984-1985 1985-1986 1986-1987 1987-1988 1988-1989 1989-1990 1990-1991 1991-1992 1992-1993 1993-1994 1994-1995 1995-1996 1996-1997 1997-1998 1998-1999 1999-2000 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024 2024-2025 2025-2026 2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036 2036-2037 2037-2038 2038-2039 2039-2040 2040-2041 2041-2042 2042-2043 2043-2044 2044-2045 2045-2046 2046-2047 2047-2048 2048-2049 2049-2050 2050-2051 2051-2052 2052-2053 2053-2054 2054-2055 2055-2056 2056-2057 2057-2058 2058-2059 2059-2060 2060-2061 2061-2062 2062-2063 2063-2064 2064-2065 2065-2066 2066-2067 2067-2068 2068-2069 2069-2070 2070-2071 2071-2072 2072-2073 2073-2074 2074-2075 2075-2076 2076-2077 2077-2078 2078-2079 2079-2080 2080-2081 2081-2082 2082-2083 2083-2084 2084-2085 2085-2086 2086-2087 2087-2088 2088-2089 2089-2090 2090-2091 2091-2092 2092-2093 2093-2094 2094-2095 2095-2096 2096-2097 2097-2098 2098-2099 2099-2100 2100-2101 2101-2102 2102-2103 2103-2104 2104-2105 2105-2106 2106-2107 2107-2108 2108-2109 2109-2110 2110-2111 2111-2112 2112-2113 2113-2114 2114-2115 2115-2116 2116-2117 2117-2118 2118-2119 2119-2120 2120-2121 2121-2122 2122-2123 2123-2124 2124-2125 2125-2126 2126-2127 2127-2128 2128-2129 2129-2130 2130-2131 2131-2132 2132-2133 2133-2134 2134-2135 2135-2136 2136-2137 2137-2138 2138-2139 2139-2140 2140-2141 2141-2142 2142-2143 2143-2144 2144-2145 2145-2146 2146-2147 2147-2148 2148-2149 2149-2150 2150-2151 2151-2152 2152-2153 2153-2154 2154-2155 2155-2156 2156-2157 2157-2158 2158-2159 2159-2160 2160-2161 2161-2162 2162-2163 2163-2164 2164-2165 2165-2166 2166-2167 2167-2168 2168-2169 2169-2170 2170-2171 2171-2172 2172-2173 2173-2174 2174-2175 2175-2176 2176-2177 2177-2178 2178-2179 2179-2180 2180-2181 2181-2182 2182-2183 2183-2184 2184-2185 2185-2186 2186-2187 2187-2188 2188-2189 2189-2190 2190-2191 2191-2192 2192-2193 2193-2194 2194-2195 2195-2196 2196-2197 2197-2198 2198-2199 2199-2200 2200-2201 2201-2202 2202-2203 2203-2204 2204-2205 2205-2206 2206-2207 2207-2208 2208-2209 2209-2210 2210-2211 2211-2212 2212-2213 2213-2214 2214-2215 2215-2216 2216-2217 2217-2218 2218-2219 2219-2220 2220-2221 2221-2222 2222-2223 2223-2224 2224-2225 2225-2226 2226-2227 2227-2228 2228-2229 2229-2230 2230-2231 2231-2232 2232-2233 2233-2234 2234-2235 2235-2236 2236-2237 2237-2238 2238-2239 2239-2240 2240-2241 2241-2242 2242-2243 2243-2244 2244-2245 2245-2246 2246-2247 2247-2248 2248-2249 2249-2250 2250-2251 2251-2252 2252-2253 2253-2254 2254-2255 2255-2256 2256-2257 2257-2258 2258-2259 2259-2260 2260-2261 2261-2262 2262-2263 2263-2264 2264-2265 2265-2266 2266-2267 2267-2268 2268-2269 2269-2270 2270-2271 2271-2272 2272-2273 2273-2274 2274-2275 2275-2276 2276-2277 2277-2278 2278-2279 2279-2280 2280-2281 2281-2282 2282-2283 2283-2284 2284-2285 2285-2286 2286-2287 2287-2288 2288-2289 2289-2290 2290-2291 2291-2292 2292-2293 2293-2294 2294-2295 2295-2296 2296-2297 2297-2298 2298-2299 2299-2300 2300-2301 2301-2302 2302-2303 2303-2304 2304-2305 2305-2306 2306-2307 2307-2308 2308-2309 2309-2310 2310-2311 2311-2312 2312-2313 2313-2314 2314-2315 2315-2316 2316-2317 2317-2318 2318-2319 2319-2320 2320-2321 2321-2322 2322-2323 2323-2324 2324-2325 2325-2326 2326-2327 2327-2328 2328-2329 2329-2330 2330-2331 2331-2332 2332-2333 2333-2334 2334-2335 2335-2336 2336-2337 2337-2338 2338-2339 2339-2340 2340-2341 2341-2342 2342-2343 2343-2344 2344-2345 2345-2346 2346-2347 2347-2348 2348-2349 2349-2350 2350-2351 2351-2352 2352-2353 2353-2354 2354-2355 2355-2356 2356-2357 2357-2358 2358-2359 2359-2360 2360-2361 2361-2362 2362-2363 2363-2364 2364-2365 2365-2366 2366-2367 2367-2368 2368-2369 2369-2370 2370-2371 2371-2372 2372

*c1c[nH]c2cc[nH]12c1cc2c(c1)sc(n2)*C1=CC=C2C(=C1)S=C2NC1=CC=C2C(=C1)N(C2)OO=C1C=CC(=O)N1c1cc[nH]c2c1[nH]c2c1cc[nH]c2c1[nH]c2C1=CC=C2C(=C1)N(C2)N3C=CC=C3*c1ccc2c(c1)c(c3c2c[nH]3)N1C=CC=CC=C1*c1ccc2c(c1)c(c[nH]2)c3cc[nH]3*c1nc2ccncc2s1*c1ccc2nc3ccccc3n2c1*c1ccc2c(c1)c(c[nH]2)c3cc[nH]3c1ccc2c(c1)c(c3ccccc32)Oc1cc2c(c1)ncn2C3=CC=CC=C3C1=CC=C2C(=C1)S=C(C=C2)N3C=CC=CC=C3*c1cc2c(c1)ncn2S *c1ccc2c(c1)c(c[nH]2)OC1=CC=C2C(=C1)OCC2C1=CC=C2C(=C1)N(C2)C3=CC=CC=C3c1ccc2c(c1)c(c3ccccc3n2)c4ccccc4c1ccc2c(c1)c(c3ccccc3n2)c4ccccc4*c1ccc2nc3ccccc3nc21*c1ccc2nc3ccccc3cc2n1

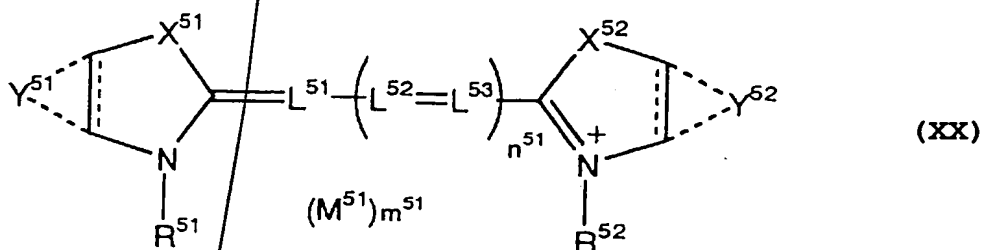
in each structural formula, * represents a position to link to a methine chain.

3. A silver halide photographic material which comprises at least one methine dye represented by the following formula (I):



wherein Y represents a thiophene ring in which at least one halogen atom is substituted, and Y may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring, or may have a substituent; the bond between two carbon atoms in which Y is condensed may be a single bond or a double bond; Z represents an atomic group necessary to form a 5- or 6-membered nitrogen-containing heterocyclic ring, and Z may further be condensed with other 5- or 6-membered carbocyclic ring or heterocyclic ring; R represents a substituted or unsubstituted alkyl group, aryl group, or heterocyclic group; D represents a group necessary to form a methine dye; L¹ and L² each represents a methine group; p represents 0 or 1; M represents a counter ion; and m represents a number of 0 or higher necessary to neutralize the charge in the molecule.

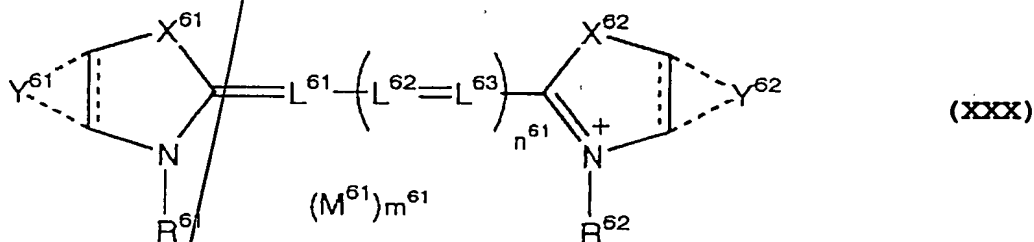
4. The silver halide photographic material as claimed in claim 1, wherein the methine dye represented by formula (I) is represented by the following formula (XX):



wherein Y^{51} represents a furan ring or a pyrrole ring which may be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring or may have a substituent, and two carbon atoms to which Y^{51} is condensed may be bonded by a single bond or a double bond; X^{51} and X^{52} each represents an oxygen atom, a sulfur atom, a selenium atom, a tellurium atom, a nitrogen atom, or a carbon atom; Y^{52} represents an atomic group necessary to form a benzene ring or a 5- or 6-membered unsaturated heterocyclic ring, which may further be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring or may have a substituent, and two carbon atoms to which Y^{52} is condensed may be bonded by a single bond or a double bond; R^{51} and R^{52} each represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group; L^{51} , L^{52} and L^{53} each represents a methine group; n^{51} represents 0, 1, 2, 3 or 4; M^{51} represents a counter ion; and m^{51} represents a number of 0 or higher necessary to neutralize the charge in

the molecule.

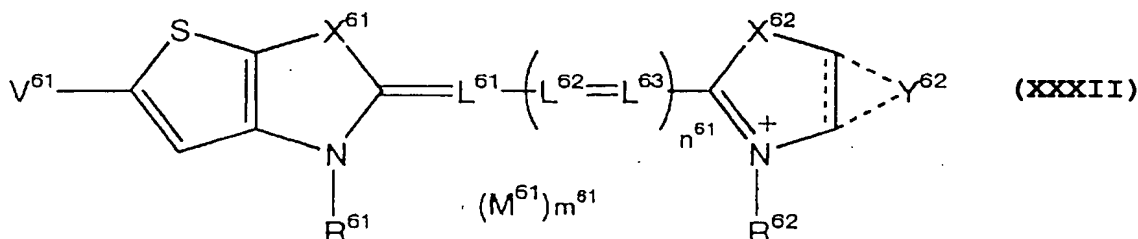
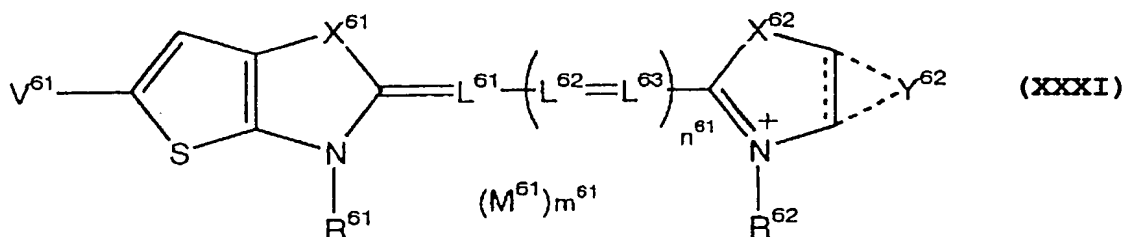
5. The silver halide photographic material as claimed in claim 3, wherein the methine dye represented by formula (I) is represented by the following formula (XXX):



wherein Y^{61} represents a thiophene ring which may be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring or may have a substituent but is substituted with at least one halogen atom, and two carbon atoms to which Y^{61} is condensed may be bonded by a single bond or a double bond; X^{61} and X^{62} each represents an oxygen atom, a sulfur atom, a selenium atom, a tellurium atom, a nitrogen atom, or a carbon atom; Y^{62} represents an atomic group necessary to form a benzene ring or a 5- or 6-membered unsaturated heterocyclic ring, which may be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring or may have a substituent, and two carbon atoms to which Y^{62} is condensed may be bonded by a single bond or a double bond; R^{61} and R^{62} each represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group; L^{61} , L^{62} and L^{63} each represents

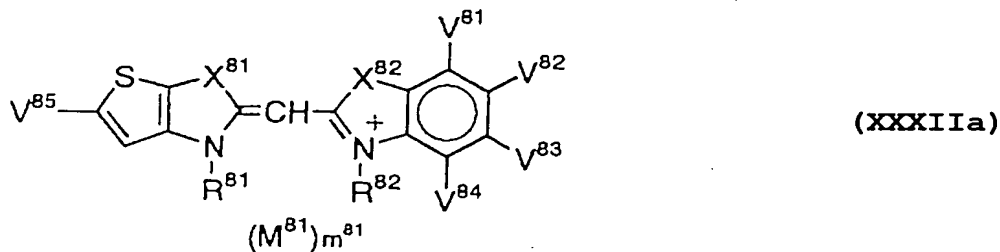
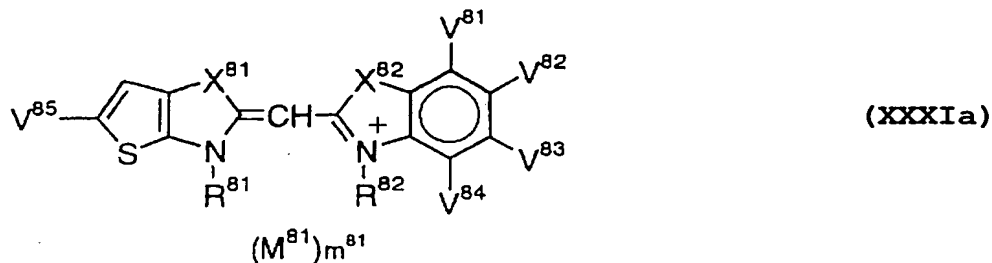
a methine group; n^{61} represents 0 or 1; M^{61} represents a counter ion; and m^{61} represents a number of 0 or higher necessary to neutralize the charge in the molecule.

6. The silver halide photographic material as claimed in claim 5, wherein the methine dye represented by formula (XXX) is represented by the following formula (XXXI) or (XXXII):



wherein L^{61} , L^{62} and L^{63} each represents a methine group; V^{61} represents a halogen atom; X^{61} , X^{62} , Y^{62} , R^{61} , R^{62} , L^{61} , L^{62} , L^{63} , n^{61} , M^{61} and m^{61} each has the same meaning as defined in formula (XXX) in claim 5.

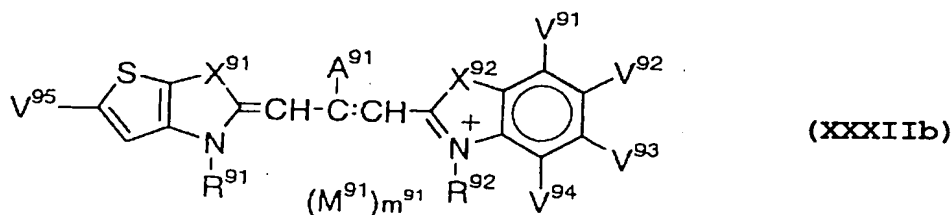
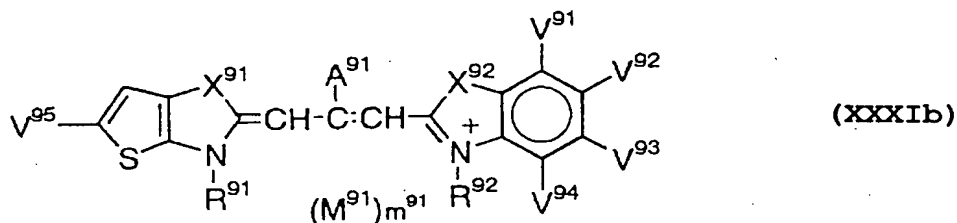
7. The silver halide photographic material as claimed in claim 6, wherein the methine dye represented by formula (XXXI) or (XXXII) is represented by the following formula (XXXIa) or (XXXIIa) :



wherein V^{85} represents a halogen atom; X^{81} and X^{82} each represents an oxygen atom or a sulfur atom; R^{81} and R^{82} each represents an alkyl group substituted with an acid radical; V^{81} , V^{82} , V^{83} and V^{84} each represents a hydrogen atom or a substituent; M^{81} represents a counter ion; and m^{81} represents a number of 0 or higher necessary to neutralize the charge in the molecule.

8. The silver halide photographic material as claimed in claim 7, wherein in the methine dye represented by formula (XXXIa) or (XXXIIa), at least either R^{81} or R^{82} represents an alkyl group substituted with a carboxyl group or an alkanesulfonylcarbamoyl group, and the other represents an alkyl group substituted with a sulfo group.

9. The silver halide photographic material as claimed in claim 6, wherein the methine dye represented by formula (XXXI) or (XXXII) is represented by the following formula (XXXIb) or (XXXIIb):



wherein V^{95} represents a halogen atom; X^{91} and X^{92} each represents an oxygen atom or a sulfur atom; R^{91} and R^{92} each represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group; A^{91} represents a methyl group, an ethyl group or a propyl group; V^{91} , V^{92} , V^{93} and V^{94} each represents a hydrogen atom or a substituent; M^{91} represents a counter ion; and m^{91} represents a number of 0 or higher necessary to neutralize the charge in the molecule.

10. A methine dye represented by formula (XXXIa), (XXXIIa), (XXXIb) or (XXXIIb).

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